AMENDMENTS TO THE CLAIMS

This listing of claims will replace all prior versions, and listings, of claims in the application:

In the claims

Claims 1-5 (cancelled)

Claims 6 (currently amended): A substantially pure ~~protein~~ polypeptide comprising an amino acid sequence selected from the group consisting of SEQ ID NO: 3 [[or]] and SEQ ID NO: 6.

Claims 7 (currently amended): A substantially pure polypeptide having an amino acid sequence which is at least 80% identical to an amino acid sequence selected from the group consisting of SEQ ID NO: 3 [[or]] and SEQ ID NO: 6, wherein

a) said polypeptide is activated by thrombin; and

b) said polypeptide mediates phosphoinositide hydrolysis in a cell expressing said polypeptide on its surface.

Claim 8 (currently amended): A substantially pure polypeptide which is a fragment ~~or analog~~ of SEQ ID NO: 3 or SEQ ID NO: 6 comprising a domain capable of activation by thrombin and mediating phosphoinositide hydrolysis.

Claims 9-12 (cancelled)

Claim 13 (currently amended-withdrawn): A method of testing a candidate compound for its ability is act as an agonist of a protease-activated receptor 3 ligand, the method comprising:

a) contacting a candidate compound with a cell which expresses on its surface a recombinant protease-activated receptor 3 ~~protein~~ polypeptide of claim 6 or 7 ~~or biologically active fragment or analog thereof~~;

b) measuring PAR3-mediated response of the cell; and

c) identifying the candidate compound as an agonist wherein the contacting causes a substantial increase in PAR3-mediated response.

Claim 14 (currently amended-withdrawn): A method of testing a candidate compound for the ability to act as an antagonist of a protease-activated receptor 3 ligand, the method comprising:

a) contacting in the presence of a protease-activated receptor agonist a candidate compound with a cell which expresses on its surface a recombinant protease-activated receptor 3 ~~protein~~ polypeptide of claim 6 or 7~~or biologically active fragment or analog thereof~~;

b) measuring PAR3-mediated response of the cell; and

c) identifying the candidate compound as an antagonist wherein the contacting causes a substantial decrease in PAR3-mediated response relative to PAR3-mediated response in the absence of the candidate antagonist.

Claim 15 (currently amended-withdrawn): The method of claim 14, wherein the cell is a mammalian cell which normally presents substantially no protease-activated receptor 3 on its surface, and the PAR3-mediated response measured ~~in~~ is intracellular phosphoinositide hydrolysis in the cell.

Claims 16-20 (cancelled)

Claim 21 (currently amended): The substantially pure ~~protein~~ polypeptide of claim 6, wherein the amino acid sequence is SEQ ID NO: 3.

Claim 22 (currently amended): The substantially pure ~~protein~~ polypeptide of claim 6, wherein the amino acid sequence is SEQ ID NO: 6.

Claim 23 (currently amended): The substantially pure ~~protein~~ polypeptide of claim 7, wherein the amino acid sequence is 80% identical to the amino acid sequence of SEQ ID NO: 3.

Claim 24 (currently amended): The substantially pure ~~protein~~ polypeptide of claim 7, wherein the amino acid sequence is 80% identical to the amino acid sequence of SEQ ID NO: 6.

Claim 25 (currently amended): The substantially pure ~~protein~~ polypeptide of claim 8, wherein the ~~amino acid sequence~~ fragment is 80% identical to the amino acid sequence of SEQ ID NO: 3.

Claim 26 (currently amended): The substantially pure ~~protein~~ polypeptide of claim 8, wherein the ~~amino acid sequence~~ fragment is 80% identical to the amino acid sequence of SEQ ID NO: 6.

Claim 27 (new): A composition comprising the substantially pure polypeptide of claim 6 or 7.